

**ABSTRACT OF THE DISCLOSURE**

A mechanism is provided for delivering power to an on-die component (such as a buffer circuit). This may include a package unit having a low frequency delivery path and a high frequency delivery path and a die having the on-die component and a capacitive device each coupled in parallel between a first node and a second node. The die may further include a low frequency reception path and a high frequency reception path. The low frequency reception path may couple to the low frequency delivery path on the package unit and to the first node. The high frequency reception path may couple to the high frequency delivery path on the package unit and to the first node. The high frequency reception path may include a damping resistor.